

Rio Algom
Rio Tinto

*fill in Rio Algom.
mine & mill file*

July 28th, 1975.

Dr. Lyman J. Olsen,
Director of Health,
Division of Health,
44 Medical Drive,
Salt Lake City, UTAH. 84113.

Dear Sir:

We are forwarding to you herewith a draft of a letter which, if approved, will be signed by both Rio Algom Corporation and Rio Algom Limited and sent to you.

The enclosed letter is intended to create a binding primary obligation on Rio Algom Corporation as principal and on Rio Algom Limited as guarantor. If you have any reservations with respect to the terms of the enclosed letter, we would be pleased to have your comments and suggestions.

We would appreciate hearing from you as soon as possible as we are anxious to complete this, as we understand it is the last outstanding item in our application to the Nuclear Regulatory Commission for an Operating Licence.

Yours truly,



R. D. Lord,
Vice President,
Research & Development.

RDL/mm
Encl.

cc: Wm. C. Quigley,
Assistant Attorney General,
Division of Health.

BASIS OF UNDERTAKING TO DIVISION OF HEALTH, UTAH
BY RIO ALGOM CORPORATION, RIO ALGOM LIMITED

At its mill in San Juan County in South Utah, Rio Algom Corporation is in progress of depositing uranium tailings in a 15 acre area, and has provided an additional and adjoining storage area of approximately 26 acres. Rio Algom understands that on termination of milling activities such tailings areas are required to be stabilized against erosion and covered to maintain radiation within levels that meet applicable environmental standards. It has stated to the Atomic Energy Commission and since to the Nuclear Regulatory Commission that it is prepared to act responsibly in this connection, and specifically undertakes to meet the requirements as set out in the Atomic Energy Commission Regulatory Guide 3.23, November 1974 and the American National Standards Institute, ANSI-N313.1974.

The regulations prohibit, except as authorized by the Commission as stated in Section 20.105(a) of "Standards for Protection Against Radiation" (10 CFR Part 20), the use of licensed materials in such a manner as to create in any unrestricted area, radiation levels which, exceed 2 millirem per hour for continuous exposure.

At present, with 2 feet of neutral soil material covering a tailings area, the radiation readings at 3 feet above the fill area is .007 mR/hr. It is computed that a cover of neutral soil material to a depth of 12 inches or more results in a level of .014 mR/hr and well within the regulatory guidelines (AECR Guide 3.23) of 2 mR/hr. Approximately 66,000 cubic yards of cover is required, should both storage areas be fully used, and the cost of placement in 1975 dollars is \$136,000.

As the regulations require that uranium tailings deposits be stabilized for 50 years or more, safeguards against water erosion are necessary. Fortunately the Rio Algom deposits lie within a very small watershed of approximately 1 square mile. A diversion ditch is planned to bypass drainage from the greater part (385 acres) of the watershed outside the storage area. The yardage of this ditch, to be completed when operations terminate, is 25,000 cubic yards and the cost in 1975 dollars is \$56,700.

As the climate is arid precautions against wind erosion are also called for. Rio Algom intends that at least the upper layer of neutral cover on the tailings be native soil to support indigenous vegetation, which will be planted or seeded.

As restrictions to use of the site are required Rio Algom will erect four concrete markers, visible above surface and lettered "Buried Tailings - Radioactive - Site not approved for excavation or continuous occupation" or other designation as may be acceptable.

It is to be anticipated that inspection and a nominal amount of maintenance of the site will be required in the public interest. This may include removal of accumulation of debris or obstruction in the bypass ditch and possibly repair of soil cover. To provide for such remedial work Rio Algom will deposit with the Division of

Health, of the State of Utah, \$20,000 at the time the milling activity terminates. *by note: the arrangement is not provided by the Division of Health will be responsible for any future procedure considered a final solution to the tailings pile problem.*

As the duration of operations of the Rio Algom mill is uncertain at this time, the area of tailings to be stabilized is not known. It may be considerably less than that contemplated in the environmental statement. On the other hand, and aside from the interests of Rio Algom, if it should be desirable to operate the plant as a custom mill, the terminal work may be more - at some later date. For the above reasons, the earlier plan of posting a bond to cover the estimated terminal work does not appear applicable

to the situation. It is now proposed that Rio Algom Limited back an undertaking by Rio Algom Corporation to discharge its obligations relative to the tailing deposit at such time as conditions are appropriate for the work to be carried out.

FOR RIO ALGOM CORPORATION

By _____

By _____

FOR RIO ALGOM LIMITED

(SEAL)

By _____

By _____